

Status Report

Lower East Coast Aquifer Systems and Water Conservation Areas



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Lower East Coast Water Supply

- **Local Groundwater Systems**
 - Primary water supply source
 - Groundwater levels typically below normal
- **Water Conservation Areas**
 - Secondary water supply source
 - WCA-1 - Palm Beach County, Northern Broward County - below environmental floor
 - WCA-2A – Broward County - below environmental floor
 - WCA-3 – Dade County - slightly above environmental floor

Lower East Coast Water Supply

(Continued)

- **Lake Okeechobee**

- **Backup water supply source**
- **Lowest stage on record for this date – 10.2 feet**
- **1 million acre feet of additional water made available**
- **Emergency pumps required at elevation 10.0 feet**

Potential Effects of Drought Conditions

- **Saltwater intrusion at coastal wellfields**
- **Lower lake and canal elevations**
- **Muck fires in Everglades, wildfires along coast**
- **Lower crop yields by agriculture**
- **Navigational constraints**
- **Commercial & recreational fishing impacts**
- **Environmental impacts**
- **Economic impacts**

Real Time Management of LEC Aquifer Systems

Objective: To manage and account for all water uses of the system, assuring the most efficient use of dwindling regional water supplies

- **Weekly drought update meetings and hotline for affected users**
- **Jointly refine drought management plan**
 - **Additional water conservation both urban and agriculture**
 - **Expand comprehensive monitoring and operational plan**

Real Time Management of LEC Aquifer Systems (Continued)

- Modify operations to prop up groundwater elevation to east near wellfields**
 - Saltwater intrusion, lake and canal elevation real time data base**
- Possible deviations to Water Conservation Area floor elevations**
 - Consider shared adversity**
 - Corps of Engineers has lead in addressing endangered species act**
 - District documenting existing environmental conditions**
 - District will provide Corps of Engineers a refined drought management plan**

Factors Considered in Determining Serious Harm to the Water Resources

- **Potential for increased saltwater intrusion or other groundwater contamination**
- **Potential for irreversible, adverse impacts on fish and wildlife**
- **Other factors adversely impacting the water resources**

Water Restriction Discussion



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Phase 2 Pumpage Reduction for Month of February 2001

- **Phase 2**
 - **Goal 30% reduction**
- **District Wide reduction approximately 10%**
 - **Palm Beach** **9%**
 - **Broward** **13%**
 - **Miami-Dade** **6%**
 - **Lee** **10%**
 - **Collier** **14%**

Comparison of Water Restrictions Phase 2 and 3

- **Major Difference:**
 - **Phase 2: Increased inconvenience**
 - Goal 30% reduction
 - **Phase 3: Economic hardships**
 - Goal 45% reduction

Phase 2 and Phase 3 Residential

- **Residential irrigation and related outdoor water use restricted from 2 days a week to 1 day a week**
 - Hours reduced from 8 hours/week to 3 hours/week
 - Odd addresses: Saturday, 4 to 7 a.m.
 - Even addresses: Sunday, 4 to 7 a.m.
- **Fountains and water falls are prohibited**
- **New landscaping reduced from 4 days a week to 3 days with reduced hours**

Phase 2 and Phase 3 Residential (continued)

- **Car / boat washing limited to one day a week
4 - 7 a.m., and 5 - 7 p.m., on watering days**
 - **Hours reduced from 8 hours/week to 3 hours/week**
 - **Hand watering 5 - 7 p.m. on watering days per
address**

Phase 2 and Phase 3 Agriculture

- **Hours of irrigation reduced for nurseries and some agricultural uses**
- **Agriculture**
 - overhead irrigation reduced from 20 hours a day to 12 hours a day (7 p.m. to 7 a.m.)
- **Nurseries**
 - Inside overhead irrigation: from daily to only odd number days
 - Outside overhead irrigation: reduce from 12 hours to 7 hours, every other day
 - flood irrigation reduced from 6 to 4 days a month

Phase 2 and Phase 3 Commercial

- **Operating hours reduced for commercial car washes and other equipment washing**
 - **Operating hours reduced from 24 hours to 7 hours (8 a.m. - 3 p.m.)**
- **Pressure cleaning reduced from 7 to 5 days a week (Monday-Friday) - Voluntary**

Phase 2 and Phase 3 Commercial

- **Hours of irrigation reduced for golf courses from 2 days to 1 day per week**
 - **Hours reduced from 16 to 7 hours per week**
 - **Front nine - Saturday only**
 - **Back nine - Sunday only**
- **All fountains and waterfalls must be turned off (including indoors)**

Potential Economic Impact of Phase 3 Restrictions

- **Lawns - Individual Homeowners**
- **Landscaping - HOA, Commercial, Residential**
- **Commercial Car Washes**
- **Landscape Maintenance & Installation
Business**
- **Landscape Architects**
- **Golf Course/Turf Grass**
- **Construction Certificate of Occupancy
Delays**

Water Shortage Management Options

- **Remain at Phase 2 restrictions**
 - Increase public education
 - Increase District and local enforcement
- **Declare Phase 3 restrictions**
 - All use class affected
 - Significant economic impacts likely
- **Declare modified Phase 3 restrictions**
 - Target specific user groups
 - Significant economic impacts to selective users

Water Shortage Management Options (continued)

- **Remain at Phase 2; Phase 3 implemented at subregional level as required**
 - **Target specific problem areas**
 - **Inefficient uses**
 - **Direct withdrawals from WCA's**
 - **Salt water intrusion**
 - **Limit economic losses to subregional level**
 - **Manages “serious harm” to the water resources at local level**